CHAPTER 2

Alternatives

2 ALTERNATIVES

This chapter describes the alternatives being evaluated in this EIS, and summarizes how they were developed. It discusses each alternative's permanent facilities and operations, as well as temporary construction activities. It also briefly describes alternatives that are no longer being considered. The chapter concludes with a discussion of separate projects that are in this project's vicinity, and the next steps in the project's development.

2.1 Proposed Alternatives

The project is considering four alternatives, as shown on Figure 2-1:

- The No-Build Alternative maintains the existing facility but does not improve it; this alternative provides a basis for comparing the effects of the Build alternatives.
- The Preferred Alternative (a modified Elliot Point 2 Alternative) would relocate the terminal to the western portion of the Mukilteo Tank Farm as part of an integrated multimodal center; the existing terminal would be removed.
- The Existing Site Improvements Alternative would construct an improved multimodal facility by replacing the existing Mukilteo ferry terminal with an expanded terminal at the current site.
- The Elliot Point 1 Alternative would relocate the terminal to the eastern portion of the Mukilteo Tank Farm as part of an integrated multimodal center and remove the existing terminal.

The Preferred Alternative and the Elliot Point 1 Alternative assume transfer of the Mukilteo Tank Farm from the U.S. Air Force to the Port of Everett, consistent with federal legislation passed in 2001 (see *Section 2.4*).

2.1.1 No-Build Alternative

The No-Build Alternative provides a baseline against which to compare the effects of the Build alternatives. It includes what would be needed to maintain the existing ferry terminal at a functional level. Under the No-Build Alternative, an improved multimodal transportation facility to meet future demand or operational needs would not be developed. Instead, the No-Build Alternative assumes that maintenance and structure replacements would occur in accordance with legislative direction to maintain and preserve ferry facilities, but WSDOT would make no investments to improve the operation, safety, security, or capacity at the terminal. Figure 2-2 shows the key elements of the terminal and the areas that would be affected by planned maintenance and preservation activities.

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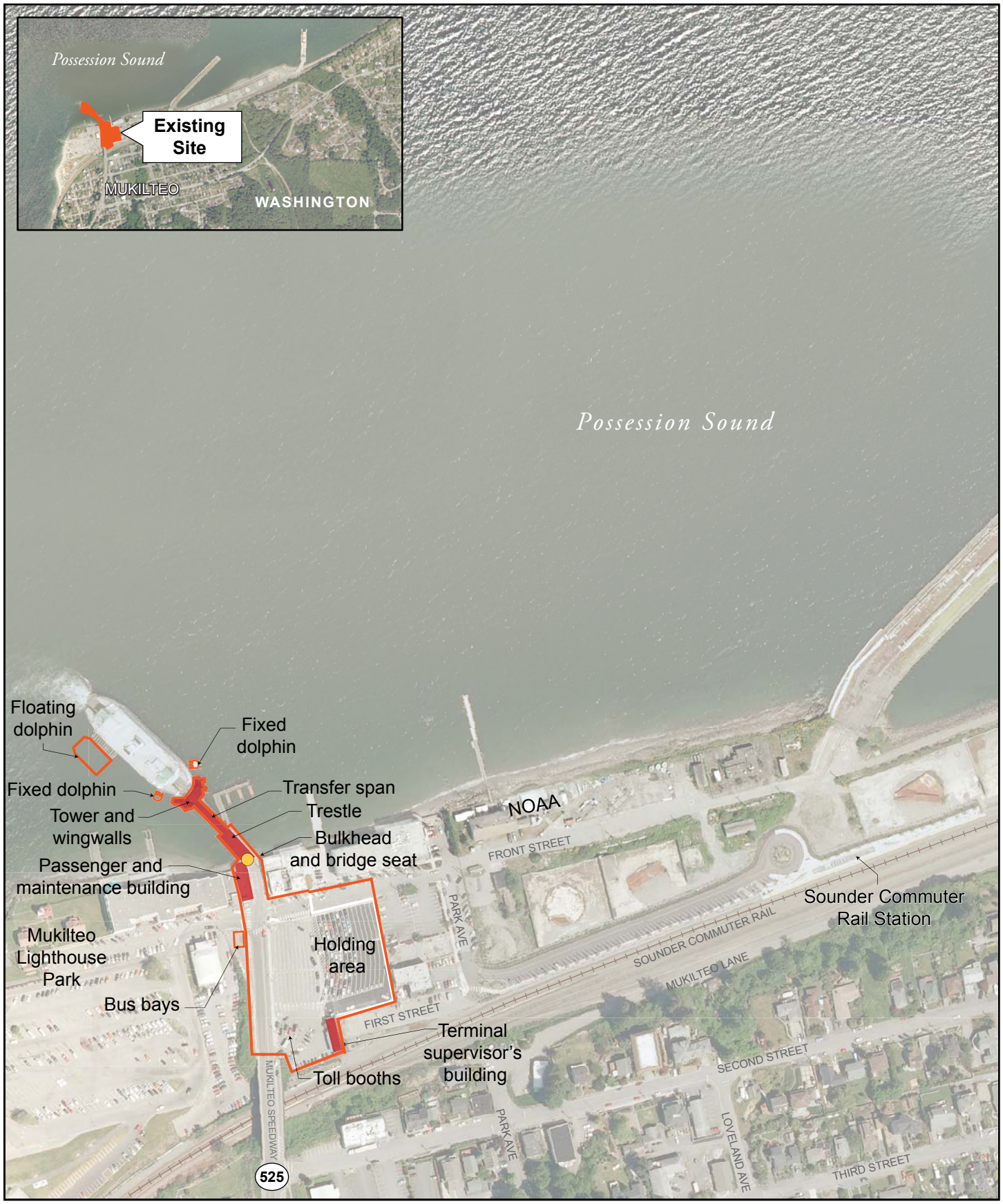
Figure 2-1. **Alternatives**



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No-Build Alternative

Elements to be Replaced

Ferry Traffic Control Light

Figure 2-2. **No-Build Alternative**

As called for by the Long-Range Plan, a system-wide vessel replacement will be implemented independent of the Mukilteo Multimodal Project. WSDOT plans to replace the current 124-vehicle vessels operating on this route with 144-vehicle vessels. This is assumed to occur with the No-Build Alternative or with any of the Build alternatives. For the Mukilteo-Clinton route, WSDOT plans to replace one vessel in 2014/2015 and the other in 2027.

Marine Components

Nearly all of the ferry docking, loading, and unloading facilities would need to be replaced over time because they will have reached the end of their lifespan by 2040. Replacement wingwalls and fixed dolphins would be constructed. A new transfer span, including hydraulic-lifting mechanisms and structures, and a bridge seat foundation would be constructed. A concrete trestle would replace the existing timber trestle extending from the land to over the water, and the existing bulkhead would be reconstructed. The replacements would include removal of existing creosote-treated timber piles supporting the structures, and installation of steel or concrete replacement piles.

The Port of Everett existing fishing pier and seasonal day moorage would remain at its current location near the ferry dock. During the replacement of the ferry docking facilities, when normal ferry service would be unavailable, WSDOT might use this facility to provide passenger-only service, which would require modification of the fishing pier and make it temporarily unavailable for fishing.

Land Components

The existing vehicle holding area would remain where it is today. The terminal supervisor's building, passenger building, and the three existing toll booths would be replaced at their current locations. Employee parking would remain at its current location. This alternative does not provide a fully secured holding area connecting to the ferry, because the terminal area crosses public streets that must remain open.

Access by buses to the ferry terminal and by vehicles to waterfront businesses, parks, and the NOAA Mukilteo Research Station would be largely unchanged. A stoplight at the trestle would continue to be used to periodically insert gaps in the queue of vehicles leaving the ferry.

Transit Facilities

The two existing bus bays would remain at the same location near the SR 525/Front Street intersection. Access to the Sound Transit Mukilteo Station, approximately 2,000 feet away, would be unchanged. No terminal components would be located on the Mukilteo Tank Farm.

2.1.2 Preferred Alternative (Elliot Point 2)

Following the release of the Draft EIS and after considering comments received on it, WSDOT concluded the Elliot Point 2 Alternative best meets the project's purpose and need. The team considered suggestions from commenters and refined Elliot Point 2's design to further improve its ability to meet the purpose and need, reduce environmental impacts, or enhance other benefits. WSDOT collaborated with

interested tribes and others to determine a culturally sensitive design approach to guide the project. The modified alternative is called the "Preferred Alternative" in this Final EIS.

The Preferred Alternative (Figure 2-3) would remove the existing ferry terminal and relocate it to the western portion of the Mukilteo Tank Farm as part of an integrated multimodal facility. The alternative would construct a new roadway connection from SR 525 east to the ferry terminal, Mukilteo Station, and the transit center.

The changes to the Elliot Point 2 Alternative were designed to:

- Minimize queuing on SR 525
- Improve the layout of the ferry slip and passenger buildings while continuing to avoid any construction that could affect a shell midden—a sensitive archaeological site
- Avoid impacts to the Sound Transit Mukilteo Station's existing parking
- Avoid reducing the general parking supply in Mukilteo's central waterfront area
- Provide a continuous walkway along the shoreline from the First Street extension to the transit center
- Develop potential design features that reflect the site's cultural and historic significance to Native American tribes
- Accommodate a relocated fishing pier and seasonal day moorage
- Extend First Street from SR 525 to the Mount Baker railroad crossing to improve emergency access and egress

Many of the elements of these design refinements are interconnected. The refinements would realign the initial section of the First Street extension to retain commuter rail parking immediately adjacent to the Mukilteo Station and create additional public parking spaces. They would also shift the layout of the transit center, ferry berth, and several terminal buildings to provide more room to store vehicles in holding lanes and help minimize queues back onto SR 525. The overall footprint of the alternative and its major elements remain similar to how Elliot Point 2 appeared in the Draft EIS.

Culturally Sensitive Design

Recognizing the historic significance of the Elliot Point area, the project will be developed with cultural elements in its design. For example:

- Traditional motifs and objects, and narrative content
- Building and facility design, such as landscaping, materials, and form
- Commemorative signs, drawings, and photography
- Public educational displays

The pictures below show examples of cultural identity features in a design.

"Mother Salmon" by Si Low Leet Sa Limmi
Source: Jones and Jones

Simulation of a concept for the terminal building interior with longhouse style design
Source: Jones and Jones

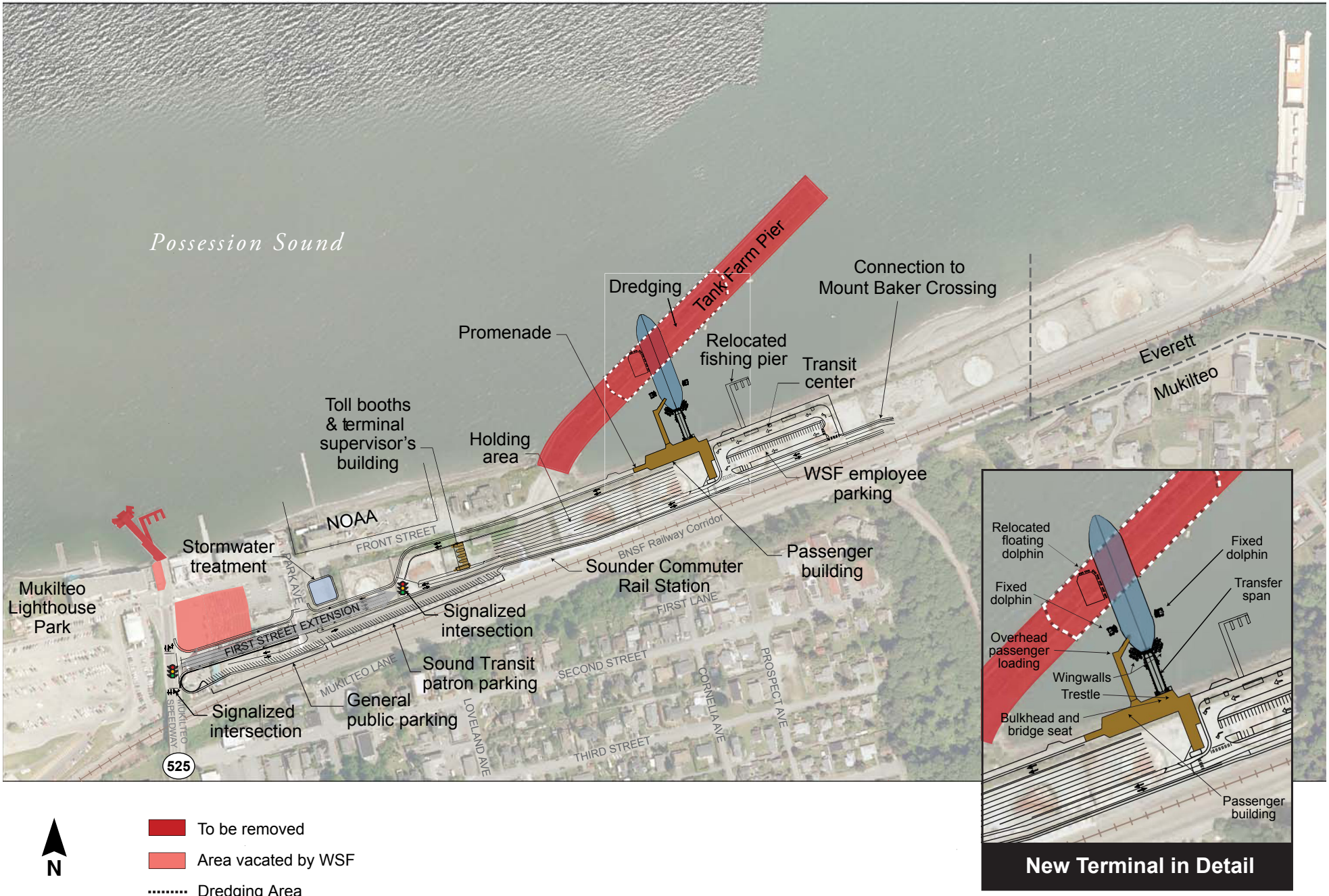

Figure 2-3. **Preferred Alternative (Elliot Point 2)**

By retaining the commuter rail parking near the station, the refinements avoid the need to replace commuter rail parking within the transit center. This allows a more compact footprint of the transit center and also accommodates a ferry employee parking area that was previously proposed at SR 525 and First Street.

Other modifications would shift the ferry slip west and refine the siting for the passenger building and overhead loading. This refinement improves the terminal layout, continues to avoid construction within the shell midden, and allows more room for vehicles in holding lanes. The passenger building would parallel the shoreline to bridge the approach to the ferry trestle and allow the building to incorporate a continuous pedestrian pathway along the shoreline, as called for in the City of Mukilteo's Shoreline Master Plan (City of Mukilteo 2011). A terminal supervisor's building would be located on top of the toll booths, instead of as a separate building.

Other modifications include measures to mitigate impacts identified in the Draft EIS. WSDOT initiated a collaborative planning and cultural design process with interested Native American tribes to guide further design efforts and explore opportunities for commemorative or interpretive sites or other design treatments. WSDOT also responded to requests suggesting the fishing pier and seasonal day moorage be relocated as a part of the new multimodal facility.

Marine Components

The Preferred Alternative would construct in-water facilities that include the features needed for the ferry berth, including new wingwalls and fixed dolphins. A floating dolphin would be relocated from the existing ferry terminal. The alternative would construct a new transfer span, including hydraulic-lifting mechanisms and structures and a bridge seat foundation, as well as a new concrete trestle and bulkhead. Because there is no beach and the water is deeper at this location, the ferry slip is near to the shore, which allows the trestle to be shorter than other alternatives, requiring fewer piles to support the trestle. The Preferred Alternative would install new concrete or steel piles for the trestle, the transfer span and overhead passenger loading, the fixed dolphins, the new passenger building, and the relocated fishing pier.

The Tank Farm Pier, which includes an estimated 3,900 piles, would be removed. The existing pier has accumulated a sediment mound beneath it, so a navigation channel about 500 feet wide would need to be dredged to provide an average lowest tide navigation depth of -28 feet, which would require dredging to a depth of -30 feet. Approximately 19,500 cubic yards of material would be dredged. The areas on either side of the existing pier are deeper and no dredging is needed elsewhere. The existing ferry berth and all of its marine structures, including the Port of Everett fishing pier and day moorage, would be removed. This would remove approximately 300 more piles.

Land Components

The land components of the Preferred Alternative are arranged to avoid excavation within a prehistoric archaeological site containing a shell midden. Fill and pavement would be used to avoid intersecting the midden, and buildings would be designed with foundations outside the midden. First Street would be realigned and extended as a four-lane roadway, beginning on a retained fill structure from a new signalized

intersection with SR 525, descending to near existing grade at Park Avenue, and continuing to a signalized entrance to the new ferry terminal. This extension would then continue as a two-lane roadway to a new bus transit and paratransit facility and the Mount Baker railroad crossing. Utilities would be extended to the terminal and the Mount Baker crossing. The Preferred Alternative would modify the access road to the Mukilteo Station and its parking, which would also be between the BNSF railroad and the new First Street extension. It also would develop a public parking area between the BNSF railroad and the new First Street, near SR 525, to replace displaced street parking. This would require cutting into the existing hillside and building retaining walls.

The extended roadway would provide sidewalks and bicycle lanes and generally follow the southern portion of the Mukilteo Tank Farm. One section would have an additional lane for transit layover.

The vehicle holding area would be on the eastern part of the Mukilteo Tank Farm site, with a holding capacity of up to 266 vehicles. The holding area was expanded compared to other alternatives to provide more capacity. This helps reduce queues extending onto SR 525, compared to the Elliot Point 2 design used for the Draft EIS. The terminal supervisor's building would be on the second story above the toll booths on the west end of the holding area.

A new two-story passenger and maintenance building would be aligned parallel to the shoreline to avoid placing a building foundation into the shell midden. It would bridge over the vehicle driveway to the ferry trestle, and an overhead passenger loading ramp would connect to the second story.

A pedestrian walkway from First Street would connect to a waterfront promenade. The walkway would connect to the passenger building and allow continuous pedestrian access along the waterfront.

New overhead lighting would illuminate First Street and the terminal facilities, including the vehicle holding area and the transit center. The site would also include landscaped areas and viewpoints. A stormwater treatment facility would be located near Front Street, east of Park Avenue.

Security fences and gates would surround the holding area and the paid passenger areas of the terminal, which would allow WSDOT to meet U.S. Coast Guard requirements during periods of heightened security.

The upland elements of the existing ferry terminal on the Mukilteo waterfront would be removed, including its buildings. The existing vehicle holding area and existing ferry employee parking areas near the current terminal would be vacated.

Transit Facilities

A transit center with six new bus bays serving scheduled routes and paratransit would be constructed east of the new terminal, with an area near the transit facility for ferry passenger drop-off and pick-up. The same area would also include designated ferry employee parking.

The extended and realigned First Street would include an inbound bus and paratransit stop for the existing Mukilteo Station, with transit vehicles continuing

their routes to the ferry terminal. Outbound transit routes would board at the new transit center east of the ferry terminal.

2.1.3 Existing Site Improvements Alternative

This alternative would construct an improved multimodal facility by replacing the existing Mukilteo ferry terminal with an expanded terminal and multimodal center on and around the current site. This expansion would improve some local traffic and safety features at the terminal facility as well as some of the multimodal transportation connections. It would provide capacity for growth in transit service at the terminal and would place buses closer to the Mukilteo Station than they are at the existing terminal. The key features of this alternative are shown on Figure 2-4.

Marine Components

All of the existing ferry facility features would be replaced. The new facility would be oriented nearly due north to allow for the potential development of a future second slip (in the existing footprint) and better alignment with SR 525. This orientation would address line-of-sight issues for Front Street traffic, pedestrians, and vehicles unloading from the ferry.

Construction of the new facility would include new wingwalls and fixed dolphins; a new concrete trestle; a transfer span, including hydraulic-lifting mechanisms; and a bridge seat foundation. New piles would be placed to support these components. The floating dolphin would be relocated from the current facility. WSDOT would also rebuild the bulkhead beneath the trestle and the bulkhead beneath the adjacent parcel to the east, where the new passenger building would be located.

To accommodate the new marine components, the Port of Everett existing fishing pier and day moorage would be removed.

Land Components

The existing vehicle holding area would remain at the same general location, and would still store the equivalent of one-and-a-half 144-vehicle vessels, or approximately 216 vehicles. WSDOT would purchase the currently leased holding area for permanent ferry use.

Four new toll booths would be constructed near the existing ones. Employee parking would be provided in an area east of the holding lanes. To make room for the new toll booths, a small building that holds the office for the terminal supervisor would be rebuilt slightly east of its current location.

A new passenger building would be constructed east of the trestle approach on property to be acquired for the project. Overhead passenger loading ramps would connect to the second story of the new passenger building.

Access and circulation to and from the ferry terminal would be revised. Front Street and Park Avenue would become one-way streets. First Street would be extended westward to a new signalized intersection with SR 525, providing an outlet for vehicles circulating from the waterfront area on Front Street and Park Avenue, and also providing a more direct route for vehicles, bicycles, and pedestrians to and from Mukilteo Station to the east. There would be minor improvements to SR 525, including continuous sidewalks. A

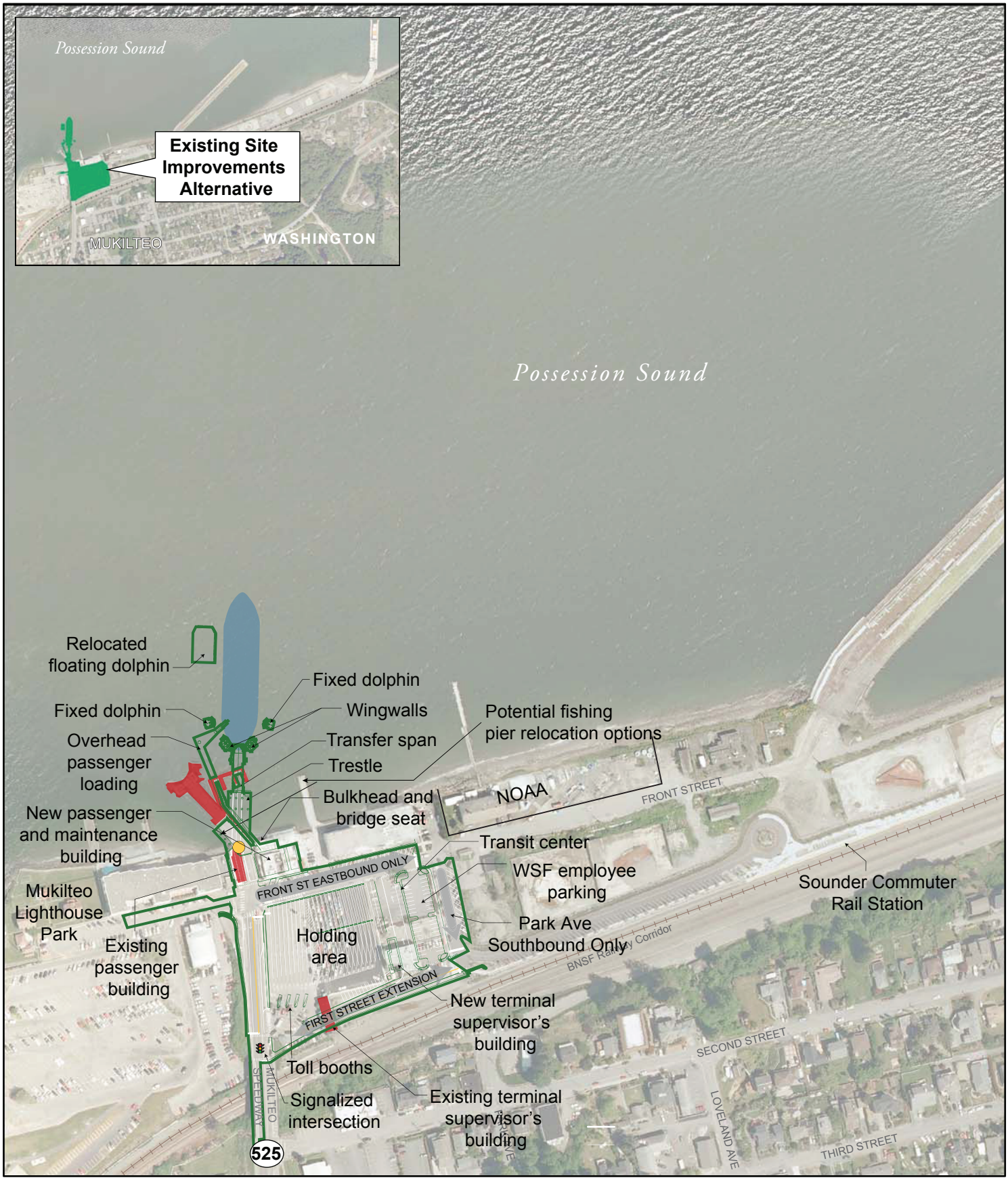

Figure 2-4. **Existing Site Improvements Alternative**

stoplight would remain on the trestle, which would continue to provide gaps in the queue of offloading ferry traffic, facilitating passenger vehicle access to the waterfront area. An area would be provided along Front Street near the new passenger terminal for ferry passenger drop-off and pick-up. This alternative also includes stormwater management improvements and other utility upgrades needed to accommodate transit and roadway improvements.

This alternative would not allow the terminal areas to be fully secured between the entrance and the ferry.

Transit Facilities

A new transit center would be constructed east of the holding lanes, combined with a parking area for ferry employees. It would include six new bus bays serving scheduled routes and paratransit service. Compared to the existing bus stops on SR 525, the new transit center would be closer to Mukilteo Station but farther from the ferry. The new transit center would be designed to meet the increased demand for transit expected in the future.

Inbound vehicles, bicycles, and pedestrians to the Mukilteo Station could follow the same path as today (over the SR 525 bridge and using Front Street and Park Avenue to reach First Street), but they could also use the new First Street extension and signalized intersection at SR 525.

2.1.4 Elliot Point 1 Alternative

This alternative would build a new ferry terminal at the eastern portion of the Mukilteo Tank Farm. Its key features are shown on Figure 2-5. This alternative was modified after the Draft EIS to reduce impacts to a public shoreline access area at the Port of Everett's Mount Baker Terminal.

Marine Components

New wingwalls and fixed dolphins would be constructed, and the floating dolphin for the existing ferry dock would be relocated to serve this site. A new transfer span, including hydraulic-lifting mechanisms and a bridge seat foundation, would be constructed. In addition, a new concrete trestle and bulkhead would be constructed. Because the shoreline slopes more gradually in this location, the ferry slip would be a minimum of 250 feet away from the top of the current riprap shoreline. This constraint would require a longer trestle leading to the transfer span and towers, and new piles to support the trestle. The wingwalls and dolphins would also require new piles.

A new passenger building and a maintenance building would be built over water upon the new concrete trestle. An overhead passenger loading ramp would connect to the second story of the new passenger building.

The Tank Farm Pier, which contains an estimated 3,900 piles, would be removed. A channel approximately 500 feet wide would need to be dredged to provide an average lowest tide navigation depth of -28 feet, which would require dredging to a depth of -30 feet through part of the area currently occupied by the pier. Approximately 19,500 cubic yards of material would be dredged.

Figure 2-5. **Elliot Point 1 Alternative**

The existing ferry terminal on the Mukilteo waterfront would be removed, with its 300 piles. The fishing pier and day moorage at the current terminal site would be demolished as part of the ferry terminal removal and would be rebuilt.

Land Components

The alternative is largely designed to avoid excavation within the boundaries of a prehistoric archaeological site and to locate more of the facility's footprint to the east of the archaeological site. Sited on the eastern portion of the Mukilteo Tank Farm, it would include parking areas, toll booths, ferry vehicle holding areas, and shoreline promenades. Pedestrians would not be able to cross in front of the trestle to travel between the two promenades and access along the waterfront would not be continuous. The site's vegetated area would include an area east of the First Street/Park Avenue intersection that would be designed to help meet stormwater management requirements, and could also provide an opportunity to develop public open space. Japanese Creek, which currently runs in a pipe culvert below the Mukilteo Tank Farm, would be restored to an open stream north of the extended First Street, and this open space area would include a 50-foot buffer on either side of the stream. A pedestrian bridge would cross the creek near the shoreline. New lighting would illuminate First Street and the terminal facilities, including holding areas.

As with the No-Build and Existing Site Improvements alternatives, the vehicle holding areas would have capacity for approximately 216 vehicles. A terminal supervisor's building would be constructed above four new toll booths east of the holding area. This structure would be oriented north/south and would be 35 feet high to provide vehicle clearance while accommodating all necessary facilities within the site.

First Street would be realigned and extended as a four-lane roadway from SR 525 to the Mount Baker Terminal. A new signalized intersection with SR 525 would be constructed at First Street. The First Street/Park Avenue intersection would be reconstructed to provide access to a reconfigured parking and access area for Mukilteo Station. The First Street extension, which would generally follow the southern portion of the Mukilteo Tank Farm, would also provide sidewalks and bicycle lanes, and two new signalized intersections at either end of the parking area for internal circulation.

Security fences and gates would be constructed to allow WSF to secure the holding area during periods of heightened security, as required by the U.S. Coast Guard.

The upland elements of the existing ferry terminal on the Mukilteo waterfront would be removed, including its buildings; in addition, the holding area and existing ferry employee parking area would be vacated.

Transit Facilities

A transit center with six bus bays serving scheduled routes and paratransit service would be constructed west of the new terminal. Compared to the existing bus stops on SR 525, the new transit center would be approximately the same distance to the Mukilteo Station, but slightly farther from the ferry. An area would be provided near

the transit facility for ferry passenger drop-off and pick-up. The transit facility would also provide an area for ferry employee parking.

Several elements of Mukilteo Station would be modified. Driveway access and parking stall striping would be reconfigured, but the total number of parking stalls would be the same. New driveways would be added to and from the realigned First Street. New sidewalks would connect to the new bus bays and ferry terminal to the east.

2.2 Construction Approach and Activities

The construction of any of the project alternatives would be a major activity that could last several years.

Despite its name, the No-Build Alternative would still involve construction activities for the replacement of the terminal's aging infrastructure, as discussed above in *Section 2.1.1*. All of the Build alternatives would remove the existing terminal, and would construct an improved terminal and supporting facilities with either a different layout (Existing Site Improvements Alternative) or at a new site (Preferred Alternative and Elliot Point 1 Alternative). The Build alternatives would have more construction activities and the longest uninterrupted construction duration (up to 2 years), while the No-Build Alternative would have intermittent construction over a longer period, potentially decades. The length of construction could be either longer or shorter depending on design, permit conditions, phasing, and the contractor's construction approach. Preconstruction activities such as property acquisition, demolition, and utility relocations could occur soon after completion of the environmental process, which is expected by 2013. Construction would also depend on the availability of funding and other approvals, but major activities could begin by 2015, and a terminal could begin operation in 2018.

All of the alternatives were designed to avoid or limit excavation in areas known to contain archaeological resources. In many areas, the approach emphasizes using fill rather than excavating. Excavation is needed for some types of construction, such as foundations or utilities, but features requiring excavation have been located outside of sensitive areas as much as possible.

Typical Durations and Phasing

No-Build Alternative

Construction would remove and alter the features needed for vessel berthing, loading, and unloading. During initial construction, ferry service would be limited, possibly eliminating some late evening/night, weekend, or midday sailings. During the replacement of the tower, bridge seat, transfer span, and related structures, a full closure of 4 to 9 months is expected, and service would be re-routed to Edmonds. It is possible that passenger-only service could be provided to Mukilteo. The No-Build Alternative's overall terminal preservation program could last about a year, if all elements were funded for completion during the same period.

Preferred Alternative (Elliot Point 2) and Elliot Point 1 Alternative

Both of these alternatives would largely be developed on a different site away from the existing terminal, minimizing the need to close the terminal prior to opening the

new terminal. The existing terminal would be removed after the new multimodal facility is in operation. The shift to the new terminal could occur overnight, or with a short closure at night or on a weekend.

Existing Site Improvements Alternative

This alternative would leave the current terminal operational until many of the replacement elements are constructed. Construction would still require schedule changes, including limited evening or weekend sailings, or weekend closures, but compared to the No-Build Alternative more of the site and facilities could be developed without affecting ongoing ferry operations. The terminal would still need to be closed for regular ferry service during final construction of the trestle elements, which would be directly in the path of current operations. It is possible that passenger-only service could be provided to Mukilteo. During final construction, regular ferry service would be re-routed to Edmonds for 1 or 2 months.

Typical Construction Activities and Staging

Except for the No-Build Alternative the major activities, such as demolition of existing buildings and the construction of new buildings, roadways, and other facilities, would occur for up to 2 years. Construction activities that would affect access would be planned, staged, and completed in a manner that would minimize disruption to the natural environment, transportation, businesses, and residents. The duration of heavy civil construction in front of any particular property is not anticipated to exceed 6 to 12 months.

The most complex structures being removed and constructed for the project are the in-water facilities. Structures to be removed (varying by alternative) include the existing pile-supported trestle and bulkhead (all Build alternatives), as well as the Tank Farm Pier (Preferred Alternative and Elliot Point 1), and the Port of Everett fishing pier and day moorage (all Build alternatives). A variety of techniques could be used to remove the existing marine structural components, depending on their condition, permitting requirements, and environmental conditions. The piles could be removed using vibratory methods, direct pulling of the piles, or cut at the mudline. The deteriorating condition of some of the piles may require capping or other partial removal methods.

The alternatives involving the Mukilteo Tank Farm would require dredging or other sediment removal for navigation.

Other major construction activities include:

- Demolition and disposal of Mukilteo Tank Farm facilities (pavement and structures, including buildings and foundations, concrete slabs and paving, light poles, power poles, tank containment walls and footings, utility lines and structures, and steel tank bottoms)—Preferred Alternative and Elliot Point 1 Alternative
- Trenching for relocation or replacement of utilities, including power, gas, sewer, water, stormwater, and communications

- Clearing, grubbing, excavation, fill, grading, and disposal of materials
- Construction of temporary in-water structures
- Construction or reconstruction of structures, including retaining walls, bulkheads, and the terminal buildings (including associated footings)
- Pile driving
- Drilled shaft or stone column installation (could require temporary roads or fill in shoreline and beach areas)
- Concrete casting
- Roadway construction, including intersections, signal systems, sidewalks, bicycle facilities, and trails
- Landscaping
- Transport of workers, equipment, materials, and debris
- Storage of equipment, including heavy trucks, cranes, and bulldozers, as well as storage of construction materials and debris

2.3 Alternatives Development Process

Nearly three decades of planning activities have focused on different approaches and alternatives to address the need for an improved multimodal facility serving travel between Whidbey Island and the Mukilteo area. Alternatives for improving the terminal have been discussed in various efforts since the 1970s. The City of Mukilteo completed a *Mukilteo Multimodal Terminal and Access Study* in 1995 (City of Mukilteo 1995). WSDOT began detailed master plan efforts with multiple concepts in the *Mukilteo Multimodal Terminal Master Plan Design Report* (WSDOT 2004). This was followed by additional planning, design, and environmental studies of a variety of concepts.

Appendix E, Alternatives No Longer Considered, identifies the previously considered alternatives developed throughout the planning process and summarizes the reasons why other alternatives are no longer being considered. The project has also produced an *Alternatives History through 2009* report (WSDOT 2010), which provides additional detail on the alternatives and concepts previously considered.

Alternatives Considered for the Current EIS

The discussion below describes how WSDOT developed the alternatives now being considered. In 2010, WSDOT developed nine concepts, or initial alternatives, to meet the purpose and need of the project. The focus was on improved constructability and environmental performance compared to the alternatives considered in the 2004 EA and 2006 EIS processes, particularly in terms of impacts on cultural resources and marine and shoreline areas. These initial alternatives built on lessons learned through earlier efforts to address current terminal deficiencies, improve operating efficiency and safety, reduce costs, and develop more compact designs to reduce impacts on archaeological sites and natural resources.

Using transportation performance, constructability, policy, and environmental measures, FTA, WSDOT, and their stakeholders evaluated the initial alternatives.

The initial alternatives included modifying the current terminal site; relocating the terminal to Elliot Point north of the existing terminal; or relocating it entirely to Edmonds or Everett:

- Existing Mukilteo Terminal
  - No-Build Alternative
  - Existing Site Improvements Alternative
- Elliot Point (Mukilteo Tank Farm)
  - Elliot Point – Option 1
  - Elliot Point – Option 2
  - Elliot Point – Option 3
  - Mount Baker Terminal
- Edmonds
  - Edmonds – Existing Terminal
  - Edmonds – Existing Site Improvements
  - Point Edwards
- Everett
  - Port of Everett South Terminal

The alternatives were evaluated by WSDOT and FTA using a set of criteria based on the project's purpose and need. These criteria included the ability of each alternative to meet the project's design, operational, environmental, and technical objectives. The results were shared with agencies, tribes, and the public during the scoping period. At the conclusion of the scoping process in 2010, WSDOT and FTA found that the three Build alternatives in Mukilteo have the best potential to meet the project's purpose and need and achieve regulatory and stakeholder approvals. The public comments during the scoping period overwhelmingly supported this direction.

Some public comments also suggested the project should include park-and-ride spaces to serve people who may want to drive to the terminal and then walk on to the ferry. WSDOT does not currently have spaces for this purpose at Mukilteo, although the City of Mukilteo has monthly permit spaces near the current terminal. WSDOT considered the direction of the Long-Range Plan, as well as cost, environmental impacts, safety, transportation benefits, and the limited available waterfront land in evaluating the various concepts. WSDOT found that alternatives focusing on multimodal improvements, reducing vehicle trips, improving safety and security, and minimizing environmental impacts best met the purpose and need.

The alternatives that failed to advance for evaluation in the EIS included relocating the terminal to the Port of Everett South Terminal or Edmonds, and developing a ferry terminal at the Port of Everett Mount Baker Terminal. These alternatives failed to satisfy the project's purpose and need because of worsened transportation performance, including traffic impacts, longer travel times, reduced service, and poor

multimodal connections; environmental impacts stemming from the displacement or conflicts with existing marine-dependent uses; and socioeconomic impacts anticipated from the loss or reduction of service to the city of Mukilteo. During scoping, the project also received written comments from a large number of its participating and cooperating agencies opposing the Everett and Edmonds alternatives.

Appendix E, Alternatives No Longer Considered, details the rejected alternatives, shows the screening evaluation measures and results, and describes the extensive process FTA and WSDOT conducted with the public, the project's cooperating and participating agencies, and interested tribes. All of these stakeholders reviewed the evaluation results and participated in the identification of the alternatives for inclusion in the EIS.

Other Alternatives Previously Considered

During the initial EIS process starting in 2006, another set of alternatives was also studied. These alternatives were removed from further consideration after they were determined to be no longer reasonable for WSDOT to pursue, based on potential impacts on archaeological resources, the amount of over-water construction, geotechnical conditions, and technical issues. The project at that time had a series of alternatives using the Mukilteo Tank Farm and a No-Build Alternative.

Project components under consideration in 2006 (see *Appendix E Alternatives No Longer Considered*) had some similarities to the current Mukilteo Tank Farm alternatives. The biggest differences were:

- A ferry dock with two ferry slips
- Incidental commercial space for retail and other services
- A 275- to 480-stall parking structure

2.4 Other Activities in the Area

The following actions are planned or have been recently completed by others in the project area. While WSDOT is coordinating with the other parties, the activities that are described in the following pages are separate actions that could be taken even if the Mukilteo Multimodal Project is not developed. The EIS sections on cumulative effects discuss the impacts of the Mukilteo Multimodal Project in combination with these and other past, current, or planned activities and projects.

U.S. Air Force Mukilteo Tank Farm

The nearly 20-acre parcel called the Mukilteo Tank Farm, east of the current ferry terminal, was used as a fuel storage and transfer facility, operated through McChord Air Force Base, from 1953 to 1973. The U.S. Air Force continued ownership after that, but operated the facility through the Defense Energy Support Center (DESC) within the Defense Logistics Agency (DLA). In 1972, the NOAA Mukilteo Research Station began operations on a portion of the property. Fuel storage and transfer operations on the site ceased in 1989 and the Air Force removed the ten bulk fuel aboveground storage tanks in 1999.

NOAA and Sound Transit already have facilities on the northwest and southwest corners of the property, respectively. A part of the Port of Everett Mount Baker Terminal is located on the east edge of the Mukilteo Tank Farm, and the Port uses a roadway through the property to access the terminal.

The U.S. Air Force conveyance of 18.85 acres of the Mukilteo Tank Farm to the Port of Everett is permitted by Section 2866 of the Military Construction Authorization Act for Fiscal Year 2001 (division B of the Spence Act; 114 Stat. 1654A-436), as amended by Section 2858 of the National Defense Authorization Act for Fiscal Year 2002 (PL 107-107). The same legislation directed the U.S. Air Force to transfer jurisdiction over the remaining 1.1 acres of the site to the U.S. Department of Commerce for continuing operation of the NOAA Mukilteo Research Station. The property includes lands, structures, pier, roadways, and other features. The transfer does not directly involve demolition or development actions. Any development would be subject to environmental review and permitting requirements under applicable federal, state, and local regulations.

In July 2010, the U.S. Air Force released a Draft EA for the transfer. In 2012, the U.S. Air Force released a second Draft EA and a Final EA with a Finding of No Significant Impact, which concluded the NEPA review of the transfer.

Sounder Mukilteo Station Phase II, Sound Transit

Sound Transit's Sounder commuter rail line between Seattle and Everett serves the Mukilteo Station. The station is located southeast of the existing ferry terminal, where First Street currently terminates. Sound Transit is developing the station in phases. The first phase, completed in 2008, included a platform on the north side of the tracks along with a dedicated surface parking lot located on the Mukilteo Tank Farm west of the station. A second phase, which will be under construction from mid-2013 to fall 2014, will provide a south platform and a pedestrian bridge over the tracks. Additional commuter parking is also planned. Sound Transit is coordinating with the City of Mukilteo to explore options to expand the supply of parking for the rail station in later phases of the station development program.

NOAA Fisheries Service Mukilteo Research Station Expansion

NOAA Fisheries Service operates a laboratory on the Mukilteo Tank Farm and plans to expand this facility following a property transfer from the U.S. Air Force to the U.S. Department of Commerce (NOAA's parent agency). NOAA's planning is still in the early stages, but the expansion could include upgraded laboratories and the addition of a public outreach and education area on the waterfront, as well as a potential replacement of the NOAA pier to support laboratory and field work.

Port of Everett Mount Baker Terminal

In 2006, the Port of Everett opened a new rail/barge transfer facility along the waterfront to allow oversize containers to be delivered to the Everett Boeing plant at Paine Field. This facility is immediately east of the Mukilteo Tank Farm on property owned by WSDOT within the city of Everett. It includes a pier and a rail spur to allow trains to directly offload large parts and materials that are shipped in for assembly at Boeing's plant at Paine Field. It also includes a public shoreline access

area, largely on U.S. Air Force property, with parking, benches, and a paved walkway. This area has not yet been opened to the public because there is no public roadway for accessing the site. For operations and employee access, the Port uses a gated road that runs through the Mukilteo Tank Farm. A public access road is part of this facility, but the Port needs the U.S. Air Force property transfer to occur before it can build this improvement. The Port is now implementing the final improvements needed to open the shoreline access area to the public.

City of Mukilteo Restoration of Japanese Creek

The City of Mukilteo's Shoreline Master Plan calls for removing a culvert that carries Japanese Creek to an outfall in Possession Sound. The creek's culvert crosses under the BNSF tracks and separates into two culverts. A restoration project would allow Japanese Creek to be free-flowing as it meets the shoreline and would build upon other watershed and habitat restoration efforts the City has been undertaking for the creek and the surrounding open space area. The Preferred Alternative, the Existing Site Improvements Alternative, and the No-Build Alternative do not develop the shoreline area in front of the creek and therefore do not include creek restoration. The Elliot Point 1 Alternative would restore Japanese Creek to an open stream, with a 50-foot buffer on each side.

2.5 Next Steps

No sooner than 30 days after the Final EIS is released, the FTA is anticipated to issue a Record of Decision. This would allow WSDOT to move forward with securing funding, completing the final design, and starting construction.